

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/BR 2004/000174

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: B65 G47/91, B65G 54/00, B65G 47/14

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>7</sup>: B65GDocumentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
----Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPODOC, WPI

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 722 432 A (COLLEEN STATON) 2 February 1988 (02.02.1988)	1, 2, 4
A	<i>figures 1, 3, 4, 10; claims 1, 3.</i> <i>figures 1, 4, 5, 10; claim 1.</i>	3, 5-9
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A	US 4 535 584 A (NOBUTAKA TSUBOTA) 20 August 1985 (20.08.1985)	1, 2, 5-9
	<i>figures 1, 4, 9; claim 1.</i>	
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A	US 4 585 113 A (JOSEPH D. GREENWELL) 29 April 1986 (29.04.1986)	1, 2, 5-9
	<i>figures 2, 3, 9; claims 1-4.</i>	
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☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search  
9 December 2004 (09.12.2004)Date of mailing of the international search report  
21 December 2004 (21.12.2004)Name and mailing address of the ISA/ AT  
**Austrian Patent Office**  
Dresdner Straße 87, A-1200 ViennaAuthorized officer  
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 36 10 953 A (FRANZ HAAS GmbH) 9 October 1986 (09.10.1986) <i>figures 1, 3, 4, 7, 8; claim 1.</i>  --  -----	1, 2, 5-9

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/BR 2004/000174

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
DE	A	3610953	1986-10-09	AT	A	101585	1990-03-15
				AT	B	391244B	1990-09-10
				US	A	4710117	1987-12-01
				GB	A	2174056	1986-10-29
US	A	4535584	1985-08-20	DE	D	3376260D	1988-05-19
				MX	A	157277	1988-11-09
				AT	T	33470T	1988-04-15
				EP	A	0117920	1984-09-12
				CA	A	1226727	1987-09-15
US	A	4585113	1986-04-29	none			
US	A	4722432	1988-02-02	CA	C	1278004	1990-12-18